Factors that Enhance Participation and Success in STEM Career Paths (STEM Career Paths)

Goal area of the activity

This National Science Foundation proposed research program addresses a national need to develop a more complete understanding of how individual student occupational lines in mathematics and science are either nourished and sustained or inhibited and attenuated during the course of student careers in secondary and postsecondary settings.

Brief Summary

STEM Career Paths is composed of three interrelated studies. The first study examines the career pathways taken by the 1993/94 cohort of Florida high school graduates. The second study focuses on trends in STEM career pathways over time from 1993/94 cohort to the present. The third study is a two-part comparative analysis of high schools that are high and low producers of students who persist on STEM career pathways. Qualitative methods of collecting data will be used to gather information from matched pairs of high and low producing schools about curriculum, school culture, teaching practices and preparation, and classroom characteristics and their impact on students.

Purpose

Results of the proposed research program will provide a better understanding of how schools, teachers and classrooms affect student outcomes including student motivation to excel in mathematics and science and embark upon STEM career pathways.

Accomplishments/Results

The proposed research program is currently under review.

Plans for the next 12 months

Upon the receipt of funding, an advisory panel will be established and the first study begun.